

S/N: 10/605,136
Reply to Office Action of October 5, 2004

Amendments to the Specification

Please amend paragraph [0007] as shown below:

The step of determining whether additional power is demanded may be based on a change in position of a gas pedal detected by a gas pedal position sensor. The step of determining whether additional power is demanded may also include computing a target torque value and a target power value. The target torque value may be compared to a predetermined torque value and the target power value may be compared to a predetermined power value. Additional power is demanded if the target torque value exceeds the predetermined torque value or if the target power value exceeds the predetermined power value.

Please amend paragraph [0022] as shown below:

The control module 34 also processes inputs from various components. These components may include a motor speed sensor 36 that detects the rotational velocity of the starter/alternator 20. [[A]] An accelerator pedal position sensor 38, also referred to as a gas pedal position sensor 38 may be used to detect when the driver wishes to accelerate the vehicle. Likewise, an input signal from a brake pedal sensor 40 may be used to determine when the driver wishes to decelerate the vehicle. The brake pedal sensor 40 may detect when the brake pedal is engaged or may detect the rate at which the brake pedal is actuated. The control module 34 may also be connected to a vehicle speed sensor 42. The speed sensor 42 may be located at the output shaft of the transmission 26, at a wheel, or any other suitable location.

Please amend paragraph [0024] as shown below:

At 100, the flowchart begins by comparing the actual or measured speed of the hybrid electric vehicle 10 to a low threshold value. The vehicle speed may be detected by the vehicle speed sensor 42. The low threshold value denotes the speed below which it may not be desirable to start the engine in order to help conserve fuel. The low threshold value may be any predetermined value, such as 5 mph. The low threshold value may be based on the vehicle performance characteristics as indicated by vehicle testing, such as dynamometer testing. Alternatively, the low threshold value may be based on vehicle performance under different driving conditions. For instance, different threshold values may be used depending

on a driving mode ~~[[is]]~~ selected by the driver. These modes may include a fuel economy mode, performance mode, on-road mode, off-road mode, or may be adapted for different weather or road conditions.

Please amend paragraph [0028] as shown below:

At 110, the process determines whether additional power is demanded by the driver. Moreover, block 110 determines whether an additional power demand warrants starting the engine. A demand for additional power may be detected by the gas pedal position sensor 38. When the control module receives a signal from the gas pedal position sensor that indicates a demand for additional power, it then determines whether to turn on the engine.